INFO-HAMS Digest Fri, 15 Dec 89 Volume 89 : Issue 1024

Today's Topics:

ARRL Letter 01-Dec-89
Description of InstantTrack
Ham Radio Applications for Atari ST
RST's in contests
Source for 2SD845?
Tentec Paragon Computer Control
The un-net on 10meters on Saturday (1600-1800Z)

Date: 14 Dec 89 21:20:42 GMT
From: hpl-opus!hpnmdla!alanb@hplabs.hp.com (Alan Bloom)
Subject: ARRL Letter 01-Dec-89
Message-ID: <1250099@hpnmdla.HP.COM>

Before 1972, I believe the only prohibition was against "remuneration for use of station". That is, you could not accept payment for use of your station. Interestingly, you COULD accept remuneration for OPERATING. It was quite legal to pay a "hired gun" to come in and operate your station in a contest, for example. That was also why it was legal for ARRL to pay the W1AW operators.

I went to work at W1AW when I graduated from college in 1972. Not long after, the FCC "clarified" the rules to make it illegal to pay operators, and then had to come up with a whole new set of rules to again make it legal to pay operators of code practice/bulletin stations. Our tax dollars at work.

73.

Al N1AL

Date: 15 Dec 89 20:16:51 GMT
From: qualcom!fpa@ucsd.edu (Franklin Antonio)
Subject: Description of InstantTrack
Message-ID: <1241@qualcom.qualcomm.com>

i have received several messages via the net from folks who read the review of InstantTrack in '73 magazine, then wrote to the address listed there and have not yet rcvd a reply. The address listed was for Project Oscar, who allowed us to list their address, even tho we didn't know how InstantTrack would be distributed at the time the review went to press. Then, about the time letters were rolling in, the Proj. Oscar office was damaged in the

San Francisco area earthquake. Everyone who wrote should receive a reply soon, from AMSAT. AMSAT will mail a one page description of InstantTrack to those who call or write. I have also taken the liberty of appending the text of that description to this mail...

InstantTrack 1.00 Now Available for IBMPC 11/20/89
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InstantTrack is a new satellite tracking program for radio amateurs, written by Franklin Antonio, N6NKF. It provides all the features of the tracking software you use now, and many you've only dreamed about. See the review in Nov '89 issue of '73 magazine.

Many of IT's best features involve the way that the user interacts with IT, and these are, of course, difficult to describe in writing. Nevertheless, here is a short summary...

Speed -- InstantTrack is faster than any other tracking program period. Humans should never wait for computers.

Ease of use -- Most commands are a single keystroke. Usually tedious functions are fully automated.

Instant Visibility -- InstantTrack shows you the positions of your "favorite" satellites, even before you issue the first keystroke. The menu of 200 satellites shows you which are visible from your location even before you select a satellite. The menu of 1754 cities shows you which cities are visible from the selected satellite even before you select one, etc.

Real-Time Displays
InstantTrack displays all the information you will normally need to operate with any satellite on its real-time display screens. Information includes: Azimuth, Elevation, Range, Doppler, Path Loss, Squint, (all shown for multiple observers) Sub-satellite point expressed as Lat/Lon, Gridsquare, and Nearest-City, Cartesian Coordinates of Observer and Satellite, Satellite Rise/Set Time, Satellite Mode, Right-Ascension, Declination, Sky Temperature, and more.

Graphics -- InstantTrack displays full color high resolution (EGA/VGA) maps of the Earth, showing satellite and observers position, two kinds of satellite footprint, grayline, etc. (Map projection is selectable.) Users can also select either a diagram of the satellite's orbit showing orientation of the satellite, or a map of the sky, showing the satellite's position against the field of stars.

You can move from map to map or satellite to satellite with a single keystroke, instantly.

Automated orbital element entry -- InstantTrack reads the popular NASA and AMSAT format satellite element files and updates its database automatically. You need never again manually enter dozens of 10 digit numbers.

Automated time setting -- InstantTrack automatically sets time on your computer by accessing the NIST (formerly NBS) time service via your modem.

Satellite & Station Database -- InstantTrack supports a database of 200 satellites and 50 observer locations. A unique grouping feature allows you to categorize satellites, and perform most operations on either a selected group, or the entire database.

City Database -- InstantTrack includes a database of 1754 cities worldwide. Locations of the satellite (sub-satellite points) and observers are displayed relative to the nearest city! Observing stations can be specified by entering as little as their city name!

Grid Squares -- InstantTrack understands the gridsquare system. Observing stations can be specifyed by typing only their gridsquare.

Satellite Covisibility -- InstantTrack shows you when satellites can see other satellites (i.e when crosslinks are possible), when satellites are in eclipse (in the shadow of the earth), etc. This display, of course, updates in real-time, so you can see crosslinks appear and disappear.

Squint Angle -- InstantTrack computes the angle by which the satellite's antennas are pointed away from you. Helps you understand why quality of communications via satellites such as Oscar-10 and Oscar-13 (spin-stabilized satellites with directional antennas) varies.

InstantTrack's graphics show you where a satellite's antennas are pointing. Maps display a contour line of squint angle. Stations within this line have low squint, and can establish the best links via such satellites.

Path Loss -- InstantTrack shows the path loss between observers and the satellite in realtime.

Schedules -- InstantTrack can show you the next three weeks schedule

for a satellite , or one day's schedule for 20 satellites on one easy-to-read screen.

Realtime Rotor Control -- InstantTrack supports realtime antenna rotor control via the Kansas-City-Tracker interface.

Background Mode --A unique background mode allows you to track satellites & point antennas in real-time while you run other programs.

Sun & Moon -- InstantTrack tracks the Sun & Moon as well as the satellites in its database.

Fast Rise-Time Finder -- InstantTrack computes the time at which a satellite will rise over the horizon without the usual delay caused by stepping through small time increments between now and then.

Tracking Multiple Stations -- You can see the computed parameters (azimuth, elevation, squint, etc) both from your perspective and from the perspective of the station at the other end of the satellite link.

Documentation -- InstantTrack comes with documentation which is both Extensive and Tutorial.

Online Help -- InstantTrack contains an online help facility which can be entered from almost any screen.

Availability

InstantTrack is available from The Radio Amateur Satellite Corporation, AMSAT-NA for $50. per copy ($70 if you're not a member) for individuals and non-profit organizations. Commercial users please call for price info.

AMSAT-NA is a non-profit organization which builds and launches amateur radio satellites. The author is a member of AMSAT, but has no financial affiliation. If you buy a copy of InstantTrack from AMSAT, the entire purchase price goes toward the amateur radio space program.

AMSAT-NA
Post Office Box 27
Washington, DC 20044

Phone: (301) 589-6062

Required Hardware...

Any IBMPC, or AT, PS2, clone, etc with at least 512k memory.

Any display type is ok for the text mode screens, but VGA preferred.
Graphics screens _require_ EGA or VGA display.

A numeric coprocessor (8087 or 80287) is NOT required, but it is recommended.

A mouse is NOT required, but can be used on the map screens.

Date: 12 Dec 89 17:14:05 GMT
From: hpfcso!hpfcmgw!ron@hplabs.hp.com (Ron Miller)
Subject: Ham Radio Applications for Atari ST
Message-ID: <1690048@hpfcmgw.HP.COM>

Reply to Doug Datwyler's request to move onto "important" stuff:

I am of the opinion that scanning, swl, jammers, military communications
and the politics and hooey associated with them are loosely related to ham
radio and that the information is of wider value and interest than you might
suspect. Persons interested in ham-radio are frequently also interested in
other forms of radio. Those interested in other forms of radio might be prime
candidates to become hams.

Having been a ham for over half my life now, (I'm 33 and been licensed
for 18 years), I have a far wider interest in radiostuff than just the
limits of my Extra privileges. Ham radio has served me well in many non-ham
places (such as at our RFI test facility here at HP, on the bridge of
Navy ships, in the radio rooms of submarines etc etc).

Politics is an inseparable part of ham radio. HR exists at the whim
of Congress. Congresscritters are politically and monetarily motivated.
If you want to ignore this aspect, you may find that there is no
ham radio at all.

If you find this stuff intolerable, just tune past it. You don't have to
copy it all.

Ron (old fart) Miller
NW0U

Date: 14 Dec 89 23:43:03 GMT
From: price@marlin.nosc.mil (James N. Price)
Subject: RST's in contests
Message-ID: <1266@marlin.NOSC.MIL>

In article <22367@ut-emx.UUCP> oo7@ut-emx.UUCP (Your Tax Dollars At Work) writes:
>
Perhaps someone should offer
>a certificate for getting any report *but* 59 or 599, indicating that
>you have actually exchanged some meaningful information with someone.
>
>
>Derek Wills (AA5BT, G3NMX)

It's too radical, man. Exchange meaningful information with a DX
station?

Merry Christmas to all--and a Happy Sunspot Peak to all of us!!

--Jim, K6ZH

Date: 13 Dec 89 17:59:10 GMT
From: rti!tijc02!eri316@mcnc.org (Ed Ingraham)
Subject: Source for 2SD845?
Message-ID: <810@tijc02.UUCP>

At a hamfest last year, I found a bargain power supply which needed just
a little repair work. Now I know why it was so cheap! I need to replace
some 2SD845 power transistors in it. Unfortunately this device and its
replacements are no longer manufactured and I can't find anything to
substitute which will fit the heat sink and circuit board (without major
surgery).

Here is my list of possible substitutions:

Number	Pd(W)	Ic(A)	Manuf	
2SD845	120	12	Toshiba	(original part)
2SC2562	150	15	Toshiba	
2SC2921	150	15	Sanken	
2SD745	120	10	Nippon	
2SD852	100	15	Nippon	
2SC2650	100	10	Toshiba	
2SD851	80	10	Nippon	

If anyone knows where I can find about 4 of one of these, please let me
know.

Toney Hudson, KB4ORC
(615)461-2320
(or via the poster, WX4S)

Date: 15 Dec 89 14:44:00 PDT
From: "MUPPET::NIX" <nix%muppet.decnet@consrt.rok.com>
Subject: Tentec Paragon Computer Control

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(PLEASE NOTE: the following is a `re-posting' of an item from
about 3 weeks ago. Due to some system problems, I lost access
to INFO-HAMS for several weeks and, don't know if anyone ever
responded or not)
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I'm looking for some other Tentec Paragon owners who have, or are
interested in, using the optional RS-232 port to control the radio.

I have an Amiga Computer and, although there aren't any `canned'
interface programs (for the Amiga), to provide access to the Paragon,
I've had reasonably good results by using a public domain terminal
emulator.

I have documentation on the IBM (and `compatibles') BASIC program
which Tentec sells and, have been using it to understand the format
of the Status `word' (several bytes in length) that's supposed to
come back from the Amiga. There appear to be inconsistances in the
portion reporting the radio's operating frequency.

If anybody's had experience in writing/modifying a computer program
to control the Tentec Paragon, I'd be grateful for thoughts/comments.

Paul WB5AGF

   Please Send Replies To: NIX%MUPPET.DECNET@consrt.rok.com

Date: 11 Dec 89 22:36:23 GMT
From: hpfcso!hpfcdc!perry@hplabs.hp.com (Perry Scott)
Subject: The un-net on 10meters on Saturday (1600-1800Z)
Message-ID: <7880097@hpfcdc.HP.COM>

I tried the un-net last Saturday, and got assaulted by contesters. It

also seems that each 5 KHz multiple is busier than the in-betweens.

I do wish that contest organizers would set up band restrictions. 29.300 through 29.600 was completely full. I had to go all the way up to 29.650 to find an un-contested frequency.

Perry (Down with Contest QRM) Scott
KF0CA

End of INFO-HAMS Digest V89 Issue #1024
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